Claims:

1. A method for managing a network using a plurality of databases, the method comprising:

selecting a first one of the plurality of databases that contains a
5   topology of the network, as an active database that is accessible;

selecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology updates;

discovering a topology of the network, and updating the second
10   database with the discovered topology; and

selecting the second database as the active database.

2. The method of Claim 1, wherein before discovering the topology of the network, the active database and the working database contain identical
15   topologies of the network.

3. The method of Claim 1, comprising:

selecting the first database as the working database;

discovering a topology of the network, and updating the first database
20   with the discovered topology; and

selecting the first database as the active database.

4. The method of Claim 1, comprising:

selecting a third one of the plurality of databases as the working
25   database;

discovering a topology of the network, and updating the third database with the discovered topology; and

selecting the third database as the active database.

5   5. The method of Claim 1, comprising:

monitoring a health of the network during the discovering based on the network topology in the active database.

6. The method of Claim 1, wherein the discovering returns a

10 connectivity of the network.

7. The method of Claim 6, wherein the discovering returns a Layer 2 connectivity of the network.

15   8. The method of Claim 1, comprising:

detecting a fault in the network;

comparing the topologies in the working and active databases;

determining a source of the fault based on the comparing.

20   9. A method for managing a network using a plurality of databases, the method comprising:

discovering the network;

updating a topology representation of the network in a working database based on the discovering;

simultaneous with the discovering and the updating, providing access
to a topology representation of the network in an active database; and

exchanging connections of the working and active databases.

5   10. The method of Claim 9, comprising:

repeating the discovering, updating, providing, and exchanging.

11. The method of Claim 9, wherein the exchanging is performed
upon completion of the discovering of the network and updating the topology
10   representation,

12. The method of Claim 9, comprising partitioning a topology
database to form the working database and the active database.

15   13. A system for managing a network using a plurality of databases,
the system comprising:

means for discovering a topology of the network and updating a
topology of the network in a database connected to the means for
discovering;

20   means for connecting the means for discovering to a first database
while at the same time connecting clients to a second database containing a
topology of the network, and for connecting the clients to the first database
after the means for discovering updates the topology of the network.

25   14. The system of Claim 13, wherein the means for connecting
exchanges connections of the first and second databases among the means

for discovering and the clients after the means for discovering completes discovery of the network.

15. The system of Claim 13, wherein after the means for discovering completes discovery of the network, the means for connecting reconnects the clients from the second database to the first database and connects the means for discovering to a third database.

16. The system of Claim 13, comprising means for monitoring a health of the network based on the network topology in the second database.

17. The system of Claim 13, comprising means for detecting a fault in the network, comparing the topologies in the first and second databases, and determining a source of the fault based on the comparing.

18. A machine readable medium comprising a computer program for causing a computer to perform:

selecting a first one of the plurality of databases that contains a topology of the network, as an active database accessible by clients;

selecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology updates;

discovering a topology of the network, and updating the second database with the discovered topology; and

selecting the second database as the active database.

19. The medium of Claim 18, wherein the computer program causes the computer to perform:

selecting the first database as with the working database;

5   discovering a topology of the network, and updating the first database with the discovered topology; and

selecting the first database as the active database.

20. The medium of Claim 18, wherein the computer program causes

10   the computer to perform:

selecting a third one of the plurality of databases as the working database;

discovering a topology of the network, and updating the third database with the discovered topology; and

15   selecting the third database as the active database.

21. The medium of Claim 18, wherein the computer program causes the computer to perform:

monitoring a health of the network during the discovering based on

20   the network topology in the active database

22. A machine readable medium comprising a computer program for causing a computer to perform

discovering the network;

25   updating a topology representation of the network in a working database based on the discovering;

simultaneous with the discovering and the updating, providing access to a topology representation of the network in an active database; and

exchanging connections of the working and active databases.

5   23. The medium of Claim 22, wherein the computer program causes the computer to perform:

repeating the discovering, updating, providing, and exchanging.

24. A method for managing a network using a plurality of databases,

10   the method comprising:

connecting a first one of the plurality of databases that contains a topology of the network, as an active database accessible by clients;

connecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology

15   updates;

discovering a topology of the network, and updating the working database with the discovered topology;

connecting the working database as the active database; and

connecting one of the plurality of databases as the working database,

20   wherein the database connected as the active database and the database connected as the working database are different databases.

25. The method of Claim 24, comprising:

repeating the discovering of the network and the updating of the

25   working database, the connecting of the working database as the active

database, and the connecting of one of the plurality of databases as the working database.